

ICI

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Stage designer Ralph Koltai used nearly 5000 square feet of 'Perspex,' ICI's acrylic sheet, for the scenery of *As You Like It*, now playing at the National Theatre. He chose 'Perspex' to create a translucent, shimmering atmosphere. His plastic 'Forest of Arden' consists of about 100 suspended tubes of 'Perspex' up to 23 feet long, representing tree trunks. Two awnings of perforated 'Perspex,' on a metal framework, suggest a background of leafy branches shot through with flickering sunlight.

Photograph: Zoe Dominic

ICI

magazine

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Cover

The longest chemical pipeline in Britain, ICI's new 138-mile ethylene pipeline across the Pennines from Wilton to Runcorn, is patrolled every fortnight by helicopter. The main lies from three to ten feet underground for most of its way, but the route is still visible to the right of the river where new vegetation has not yet covered up all trace of construction.

Photograph: Michael Taylor

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In a few weeks from now Mond Division's new giant plant to produce vinyl chloride monomer will come on stream at Runcorn in Cheshire, the final stage in one of ICI's more unusual construction projects. The plant uses a new process based on ethylene. And it will get its supplies from Heavy Organic Chemicals Division's large crackers at Wilton on Teesside through a 138-mile pipeline, built for the purpose from coast to coast across northern England.

Why was a cross-country pipeline link necessary? Why not send the ethylene by road? The answer lies in the very large tonnages involved. The daily input of the Runcorn plant alone would have called for a fleet of over 50 tankers a day, crossing the Pennines all the year round and in all weathers. And as many again would have been needed when the Division's second new plant, at Hillhouse, comes on stream next summer. Winter on Pennine roads being what it is, this was not a practical proposition – hence ICI's decision to build the pipeline.

Britain's longest chemical pipeline starts almost at sea level at Wilton, climbs to 1750 feet where it crosses the Pennines above Skipton, and drops down to sea level again at Runcorn. On the way it crosses 300 roads and 20 railway lines; goes over three canals, including the Manchester Ship Canal; and under the Ribble and Mersey and some 90 other minor rivers and streams. And it runs across land belonging to over 700 individual landowners, with each of whom separate rights of entry had to be negotiated.

The main itself is of eight-inch diameter mild steel pipe, has walls on average just over a quarter of an inch thick and is joined by over 20,000 welds. For most of the distance it is buried from three to ten feet deep. Isolating valves have been placed at 10-mile intervals, with branches at every other valve

which can be connected to a portable flare stack to burn off the gas should it ever be necessary to empty a particular section of the pipeline.

Engineering Department at Mond Division was responsible for the management of the design and construction of this project and Pencol Engineering were the overall consultants. Construction work on the pipeline began in June 1966. Four main contractors shared the job. Taylor-Woodrow Construction

were responsible for the main stretch from Wilton across the Pennines to Preston. McAlpine-Somerville and E.C. Pipelines worked together on the Preston-Warrington length. And A. Monk & Co. laid the final section from Warrington to Runcorn. For the last 40 miles of the route from Preston southwards, ICI's pipeline runs in a corridor shared with Shell UK, Shell-Mex and BP and the North-Western Gas Board, an arrangement requested by the

Opposite: HOC pipeline superintendent Ike Norminton carries out a monthly air patrol of the pipeline from Wilton to the West Coast. Alternate fortnights Harold Astbury, his colleague from Mond Division, flies the route in the opposite direction. They look out for digging or other construction work going on near the pipeline and for discoloured vegetation, which could indicate a gas leak

Below: Helicopters used for the fortnightly patrol belong to Twyford Moors Helicopters of Chester. Ike Norminton (left) meets Mr. K. Reed, the owner and pilot, at Teesside Airport. Averaging a speed of 60–70 mph, the trip over the whole pipeline route takes about three hours. If two consecutive flights should be missed through bad weather, a modified ground inspection is substituted



Photographs: Michael Taylor

Anne Bilsland

Pennine Pipeline

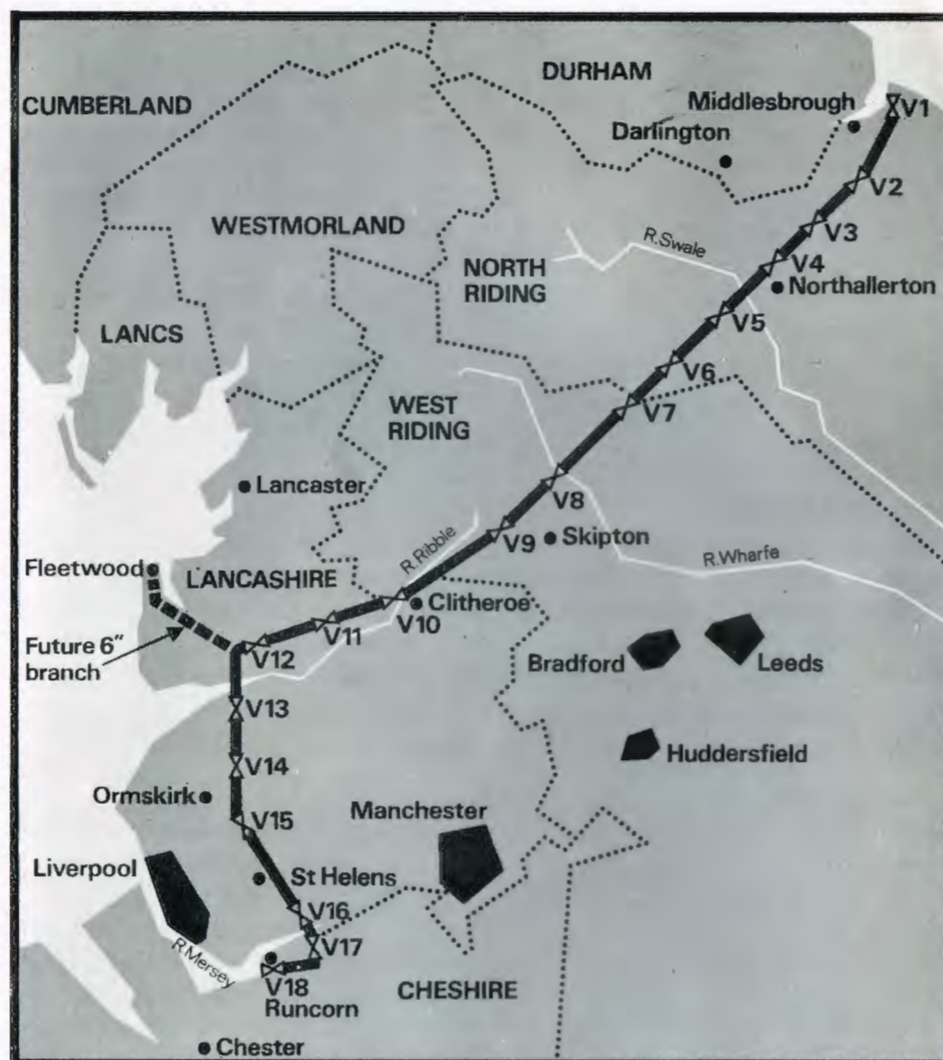
Ministry of Power to keep to a minimum the number of pipeline routes in a heavily built-up area.

In full operation the pipeline will work at a pressure of 1400 lb to the square inch. This high operating pressure is possible with a gas like ethylene because it is 'elastic' and, unlike a liquid, can be easily compressed. The higher the pressure, the smaller – and therefore cheaper – the size of main needed. It also makes it possible to pump the gas through faster and increases the amount which can be stored in the pipe. So even if Mond's VC plant had to shut down for a time, HOC could still carry on pumping for a day or two – the line will hold up to 2500 tons – and there has thus been no need to build stock tanks at either end of the line.

By 1969, when both the Runcorn and Hillhouse plants are producing to capacity, HOC will be pumping ethylene gas through the pipeline at a rate of 40 tons an hour, or 350,000 tons a year. A six-inch pipeline extension to the Hillhouse site from Preston should be finished this summer.

HOC Division 'own' the pipeline up to the boundary of Mond Division's Castner-Kellner Works at Runcorn, but for geographical reasons Mond maintain the 83 miles of line from the River Wharfe westwards. Each Division has its own pipeline superintendent, which ensures that no section of the line is more than two hours' drive away from one man or the other.

HOC's man, Ike Norminton, a former superintendent on Olefine Works, served as an engineer in the Merchant Navy. His opposite number at Mond Division, Harold Astbury, was formerly a design draughtsman in the Runcorn drawing office. Both men share a technical background, a love of the countryside and a taste for fishing, while Harold Astbury is also a keen bird watcher.



Route of the 138-mile ethylene pipeline across the Pennines from Wilton to Runcorn



The helicopter flies over the pipeline track at 300–500 feet. Ike Norminton observes, while the pilot flies the route aided by aerial markers sited at approximately one-mile intervals



The pipeline crosses 300 roads, 20 railway lines, and 90 rivers and streams on its 138-mile journey. Here, four miles north of Preston, it dips under the M6, the only motorway on the route



Keeping in touch with landowners, gamekeepers and farmers along his section is an important part of Ike Norminton's job. Here he discusses with Mr. A. R. Wilson of Nunthorpe, the emergency work carried out when ditching operations on his farm exposed the pipeline



Highest and bleakest stretch of the route is north of Skipton, where the pipeline crosses boggy moorland dotted with disused lead workings. Schedules for walking this part of the route, mainly grouse moor, are carefully planned to avoid breeding and shooting seasons



Between them the two superintendents must patrol the pipeline once a fortnight by helicopter and inspect every yard of ground along the route at least once a year, as required by the Pipelines Act. Walking the pipeline, Ike Norminton points out, needs careful planning and, above all, timing. 'Wherever it crosses private property we must of course get the farmer's or landowner's permission first. Across agricultural land we have a problem with growing crops. Skirting round the edge of a field will not do: the law demands that we follow the track every step of the way. So once a crop is up, we have lost our opportunity until after the harvest. The best time to go over is across the stubble before it gets ploughed up.'

On the higher Pennine stretches the problem is rather different. Most of the land is grouse moor, and gamekeepers frequently fire the heather to improve the feed for the grouse. These fires can spread to dry peat below the heather, which then burns for days – often reaching white heat, which would be no good at all for the pipeline. So wherever possible it avoids the drier heather moor and follows an often less direct route across boggy cotton sedge peat. 'Much of this land is too wet to walk and spongy and dangerous underfoot until May or June, but by then we are into the breeding season and the young grouse must not be disturbed. Then you come to the twelfth (August 12), and from then on they will be shooting intensively two or three times a week.'

Parts of the route over the Pennines are so hard to get at that the only way to carry the pipe in during construction was by helicopter. To reach some of these difficult stretches HOC Division have bought two specially modified Land-Rovers for the pipeline patrols. These can tackle all but the roughest country, complete with all the special

Sheep graze over the pipeline track at Eaves Green, near Preston. Over large stretches of arable land all trace of the route has already disappeared, the pipeline's presence being revealed only by concrete marker posts at field boundaries and by aerial markers every mile

Pennine Pipeline

equipment which might be necessary in an emergency—even a portable flare stack. Ethylene is a gas at normal temperature and pressure, with a faint, sweet smell. 'A leak from the pipeline would make a hissing or roaring sound, depending how severe it is. Telltale signs we look for on our patrols are frozen ground—the cooling is caused by the sudden drop in pressure—or a white cloud clinging close to the ground or discoloured vegetation.'

Equally important, the two superintendents need to know all seven hundred farmers, landowners and local authorities across whose land the pipe passes; to make sure they understand the emergency procedures, to gain their help in keeping route markers weed-free and clearly visible and, not least, to ensure that they remain aware of the pipeline's *exact* route across their property. Crops and new vegetation are swiftly covering the scar left after the contractors' men departed last year. The two superintendents also keep in close touch with the local police forces and fire authorities and help with their training programmes.

ICI has set up a private VHF radio link allowing two-way conversation between control points at Wilton and Runcorn (manned all round the clock), the helicopter, and the vehicles used by the two pipeline superintendents. GPO licence regulations require a calling-up sign before all transmissions, in this case ETHYL.

The trans-Pennine pipeline is ICI's first major pipeline project and the longest single chemical pipeline yet in Europe. Mr. Jack Lofthouse, chairman of HOC Division, sees it possibly developing over the next few years into the start of an ethylene grid (like that already existing in the Texas Gulf area of the USA) shared by a number of producers who could thus feed ethylene to a growing number of customers.

Top, left: A coal tar and glass-fibre outer wrapping and a cathodic protection system guard the steel pipeline against corrosion where it is buried in the ground. Here Ike Norminton takes a reading of the pipe to soil potential at one of the marker posts along the route. Cathodic protection test reports are submitted to the Ministry of Power

Top, right: Testing for a gas leak at the No. 1 valve on the boundary of Wilton Works. Silhouetted in the background is the new 450,000-ton ethylene plant, due on stream towards the end of the



year, which will eventually supply most of the ethylene needed for the pipeline

Bottom, left: As pipeline superintendents, Ike Norminton reports to Alan Halfpenny, manager of the Investigation Section of Wilton Distribution and Transport Department. Here they discuss a problem arising from the proposed routing of the new South Tees Parkway, which will run near the pipeline

Bottom, right: The River Wharfe at Grassington, the boundary between the two pipeline superintendents' terri-

tories. The figures 52.70 on the concrete marker post indicate mileage from Wilton. The pipeline dips under the river a few feet left of the stepping stones, and the trace shows up on the far bank

Facing page: Destination of the ethylene to be piped to Runcorn is the new vinyl chloride plant at Castner-Kellner Works, starting up shortly. The plant uses a new, more economical process based on ethylene—older plants used carbide-acetylene. Plastics Division convert the resulting vinyl chloride monomer into PVC at Hillhouse Works



In a business like men's clothing, with which ICI Fibres Ltd. are so closely concerned, you soon lose ground if you don't take your wares to the customer, whether he is in the main street of any British provincial town, overlooking a glittering Paris or Brussels boulevard, a canal in Amsterdam, or a riverside in Cologne. But sending clothes or models round Britain is one thing. To plan and carry out a lightning tour of the Continent – models, clothes, supporting services, for a display in four different centres within seven days – is another. Months of planning, discussion and negotiation lie behind that swift series of displays on a spotlit stage.

Early this spring ICI Fibres Ltd., experts by now in planning and presenting fashion to the trade and the consumer alike, mounted their operation 'Manline '69,' a presentation of styles designed and made by two internationally-known Savile Row tailors – Huntsman and Kilgour, French and Stanbury. Opening at the Café Royal, Regent Street, London, on the night of March 13th, the show went over to Paris for the 18th, Brussels for the 20th, Amsterdam for the 22nd, and Cologne for the 25th. We asked the team of Fibres men responsible why they gave this show at this time, what it all involved, and how it was organised.

'New fashions in men's clothing – suits, overcoats, raincoats, jackets, trousers,' explained Keith Calvert,

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menswear merchandising manager, 'represent bulk business today more than ever before. Millions of pounds of synthetic fibres go into men's clothes every year. And it's a bulk business in which the supplier must go to his markets and be seen to be going. Our main concern is to sell more fibres and yarns. To do this we have to help the trade sell our products at every level and wherever they are trading.'

David Webster, who handled the merchandising side, enlarged on this theme: 'More and more nowadays, to sell menswear you have to be seen by the consumer to be associated with fashion. Colour, for example, gets more important all the time. If you can present garments in your fibres through a wide range of colours and designs, this

is an added selling point. But to get fashionable clothes to the consumer you must first convince the trade. So in 'Manline '69' we offer the clothing manufacturers a style lead by presenting 50 items following a co-ordinated line, and varying from formal suits and coats to casual holiday or leisure clothes. If they respond to your lead, they are more likely to associate themselves with your fibres. What we plan here at home and abroad is to offer selected garment-makers these 50 designs in sketch form. They are offered free if the garments are made up in fabrics made from our fibres. We also help them promote the garments (and hence our fibres) through the retailer to the consumer.'

Basically, ICI Fibres Ltd. are promoting an image of British taste and fashion throughout Europe. They seek to combine the long-established tradition of good style in men's clothing with the newer competitive advantages of man-made fibres – strength, crease resistance, and the ever-widening range of colours and weights. In any individual market, they emphasise, styles may be altered to suit the garment-maker's needs, or cloth itself adapted.

But this has still not sold any Terylene. First, steps must be taken to see that the right fabrics are readily available and that the garment-maker knows where he can find them.

'We've gone to a lot of trouble to show as wide a number of fabrics

available in Terylene and Crimplene as possible from as many different manufacturers in as many countries as possible. There are cloths from all over Europe in weights from 6 oz to 19 oz in virtually every blend of Terylene with natural fibres, and in Crimplene. They include woven fabrics and knitted fabrics, with special emphasis on those created by our own fabric development people over the last two years; cloths with the new soft-handling Terylene fibre, new trouserings in high blends of Terylene with wool (up to 90 per cent Terylene), using a bright fibre that gives lustre; pile fabrics; Crimplene fabrics for men, entirely new and developed only last year. At every stage in this promotion, in the show programme, in the sketch-books of designs given out afterwards, we credit the cloth manufacturer.'

ICI Fibres chose H. Huntsman & Sons Ltd. and Kilgour, French and Stanbury Ltd. to design and make the 'Manline '69' collection because of the quality of their tailoring, their influence on style trends in menswear and their international reputations. In each continental market two of the selected garment makers will be offered the use of the tailors' names as a further promotion boost to the sales of their Manline garments. Later the tailors hope for longer term design contracts with the foreign manufacturers. They are prepared to back up these designs by going over to factories on the Continent to

help them in their production methods and give any needed guidance.

Planning began in August 1967, when Eric Jones, assistant menswear merchandising manager, first approached the tailors and asked them whether they would like to take part in the design exercise. The next stage was a series of meetings to select the cloths. Tailors normally want the sort of fabrics which are easily handled by their craftsmen. They tend to shy away from anything revolutionary. But Crimplene was a striking example of the way views can be changed. Both Huntsman and Kilgour, French and Stanbury showed considerable reluctance at first to do anything with Crimplene. But they found in practice that they could soon make up this material just as easily as any other cloth.

Once the tailors have been selected, the show designer comes into the picture too. Harry Armitage, in charge of exhibitions and presentations for ICI Fibres Ltd., explains: 'At this point the designer begins to shape the production. He consults with the tailors on the presentation of the theme as a whole – the overall pattern of colour, styling, lighting in the display. There's a good deal of argument at this stage because the tailors don't always see why he wants a lighter shade of blue at one point in the show. The designer also plans the accessories with the tailors: shoes, hats and gloves, and knitwear in our Bri-Nova



Making-up: A craftsman in action at Huntsman & Sons Ltd., one of the two West End tailors selected to design and make the Manline '69 collection

Knightsbridge: David Webster, Keith Calvert and Harry Armitage discuss show presentation over a model of the display stand



Photograph: Francis-Thompson Studios Ltd.

Fitting: Mr. Louis Stanbury, a director of Kilgour, French and Stanbury, takes a hand with the fitting of model Robert Campbell



Photographs: Malcolm Aird



range in suitable colours, developed for this show. Michael Edser, the show designer, also sketches all the clothes and makes up the sketch-book with descriptive notes: style of garment, cloth, and manufacturer's name. As soon as the show is over we have a record of it for our merchandising people to go round immediately afterwards, saying: 'Here are the styles; here are the Terylene-blend and Crimplene fabrics; now it is up to you.'

So far the operations had not differed all that much from a show confined to the borders of the UK. The major export aim of 'Manline '69' was to convey to specialist European audiences in four very different cities a feeling of Savile Row associated with Terylene-blend cloths. The people in Europe attending these shows were mostly garment-makers specialising in men's suits or coats; selected representatives of the major retail groups in each country concerned, with an influence on style and design; cloth manufacturers; and the press, trade and general, together with a number of trade VIPs and local designers.

'We work closely with ICI (Europa) Fibres,' says Eric Jones, 'and we decide with them which European centres to go to. The EEC is still a relatively new market for us, so the aim was to show a really impressive range of fabrics. These included several from continental manufacturers, although from the garment point of view the presentation is entirely British. On the Continent, remember, Terylene is an exciting new fibre which many manufacturers are looking at with considerable interest, and we want to cash in on that favourable atmosphere with a styling and fashion lead. Another thing we are capitalising on is the position of London as leader in men's fashions.'

The task of getting the whole presentation going at the right places, times and dates falls to Harry Armitage, for whom this operation has been the biggest yet in scale and the widest in range of garment. Questions he must consider vary from the customer psychology of a given country to whether or not there will be a resident electrician on the premises the day before a show is to go on; from artistic points of taste, colour, style, lighting, commentary, seating of guests and entertaining, to practical details of looking after 11 people for over a week, such as laundry service in the hotels.

How can a show being put on in

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Photograph: Ian Berry - Magnum Photos

London W.I be so tailored that it can be adapted, first, for travelling and easy packaging, second, for simple, speedy remounting in Continental locations? All the staging equipment and the lighting sets were designed to fit into the existing pattern in each place, while to be quite sure Harry Armitage made a personal reconnaissance of the sites in Amsterdam, Brussels, Paris and Cologne. There were some striking contrasts:

'In Paris we used a gilded salon of the old Hotel Crillon, in the rooms where the earlier discussions leading to the foundation of the League of Nations took place. This was formal and heavily elegant. At the other extreme, in Cologne, we used a vast concrete exhibition hall, purely functional in feeling and without character - but associated throughout Germany with exhibitions of men's clothing. In between, we had the Hiltons at Amsterdam and at Brussels. In Brussels, incidentally, it was vital to have the programme in French and Flemish and to have a commentator able to speak both languages.'

The deployment of the modelling team was an exercise in itself. The team has eight male models, a travelling wardrobe master and an electrician. Each model received an out-of-pocket expenses allowance to deal with minor transactions in four different currencies. ICI Fibres Ltd. negotiated their collective air travel while local Company people arranged transport for them in the various centres. Hotel arrangements were double checked beforehand, and finally all models were given a route card, spelling out for them all the various place times, mustering points and individual jobs. The clothes the models wore took up the whole of a 1000 cubic foot road container which went by a special route from town to town and had to be very quickly packed and unpacked on each occasion.

The 'Manline '69' presentation presupposes, of course, the existence of appropriate cloths and the ability of the trade to make them up. Both do, in fact, exist: any garment-maker can go into production whenever he wishes. In Britain, where most menswear manufacturers are already using Terylene blends extensively and are starting to use Crimplene, the task is simply to persuade them to use more cloths containing our fibres. On the Continent, where Terylene and Crimplene are much newer, the object is to make the trade familiar with them.



Photographs: Malcolm Aird



Top: Manline's first stopover was in Paris. Wearing Manline clothes models Richard Asman, Tony Newton and George McGrath see the sights on the Place de la Concorde. (Centre left) Richard Asman at the Brussels Hilton. (Centre right) Peter Gregory and Richard Asman ask an elderly Bruxelloise the way. (Left) Outside the Amsterdam Hilton, Aat Fluks of ICI (Holland) Public Relations with Heribert Bongartz of ICI Fibres Ltd.'s EEC Planning and Merchandising Department and four models



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Café Royal: In the audience, among other leading members of the trade were (top) Mr. George Cobley, chairman and managing director, Cobleys Ltd.; Mr. Monty Moss, Mrs. Monty Moss and Mr. Harry Moss of Moss Bros., directors. (Centre) Harry Richter from ICI (Italia) S.p.A.; Mr. Edward Packer, managing director of Huntsman & Sons Ltd.; Eric Jones, assistant menswear merchandising manager, ICI Fibres Ltd.; and Mr. Louis Stanbury. (Right) A quick change act, one of many, for model Tony Newton





The team went everywhere by air, their clothes by road in a special container vehicle. Robert Campbell, Tony Newton, Brian Redmond and Graeme Jones leave their aircraft after the journey from Brussels to Amsterdam

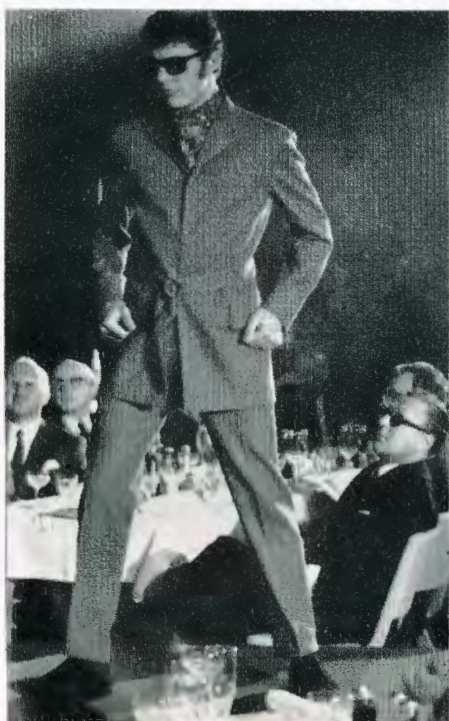
At home and on the Continent the main target is the firm which makes men's clothes on a large scale.

How will the results be measured? As Keith Calvert sums up: 'Manline '69' is a hard-sell operation. We can gauge immediate results when we see how many styles are taken up by garment makers in the various countries. We expect there will be many, and we intend making a special presentation of some of them at the International Men's Fashion Week exhibition at Cologne in August and at the Menswear Association of Britain exhibition to be held at Harrogate in October.

'Both these exhibitions are aimed primarily at retailers, who, we hope, will place orders for the various garments based on our original 'Manline '69' styles and made up in Terylene-blend and Crimplene fabrics. The final phase will be when the garments reach the shops next spring. But by then, of course, we will be deeply involved with our plans for 1970 or even beyond.'

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Cologne (below): Richard Asman modelling inside the exhibition hall. (Right) A stroll by the Rhine for some of the team.



Photographs: Ian Berry - Magnum Photos



science and the schools:

Trevor I. Williams

Industry, the universities and the schools all have their part to play in improving national prosperity, but to play that part effectively they must all work closely with one another. In the long run, industrial growth depends on a steady supply of highly-skilled men at graduate level, especially the scientists and technologists on whom progress depends. But this is not proving easy to maintain: since manufacturing industry has failed to grow at the rate expected some years ago, the universities in their

turn have had to slow down their own programmes of expansion and improvement. And both industry and the universities depend on the schools, which are themselves now subject to major economies. It is at school that the young people hoping to go on to further education decide what subjects to study, a decision which considerably influences their adult careers.

In Britain's schools, however, there is a continuing drift away from science, and the universities are turning away

well-qualified candidates from the arts faculties while there are unfilled places in science and engineering. The ablest graduates are reluctant to leave the academic world and enter industry; in Britain, industry now attracts only 40 per cent of technical graduates, compared with 50 per cent in the United States and France; 60 per cent in Holland, Sweden and Switzerland; and 70 per cent in West Germany. The number of specialists lost altogether through the brain drain is only too well known.

Dr. D. G. Jones (a deputy chairman of Heavy Organic Chemicals) answers questions after his lecture on 'Physicochemical principles in a process design'

Mrs. S. Williams
(Clifton Hall Girls' Grammar School, Nottingham)

a challenge



These problems are important to the whole of British industry, but particularly so to the chemical industry, on account of its size and its advanced scientific and technological basis. It is Britain's second largest basic manufacturing industry – mechanical engineering is marginally the first – employing nearly 500,000 people and with annual gross sales of approximately £2,500 million. It is highly capital-intensive; investment over the last decade has exceeded £1,000 million and average capital investment per man is nearly £7,000. Its dependence on highly-efficient staff is underlined by the fact that it produces one-tenth of the gross sales value of the whole of manufacturing industry yet employs only 4 per cent of the total labour force. Moreover, the chemical industry's key position in the economy is such that its production must expand at roughly twice the national average if it is to sustain the advance of the rest of industry. But the full value of its own advances in technology can be realised only if its suppliers and customers also are improving their methods with the help of well-qualified graduate staff.

It was against this background that the British chemical and allied science-based industries recently staged a major conference at Eastbourne. Its purpose was to complement other activities designed to increase the flow of school leavers into science, to correct some misconceptions about scientific work in industry, and to improve industry's scientific reputation. It described and illustrated the volume, originality and high quality of scientific research carried out by industrial organisations to counteract the illusion that this is in some way inferior to the work being done in the universities.

The Conference brought together nearly a thousand representatives of universities, schools and industry for four days of lectures and discussion, ranging from such broad issues as the interaction between industrial and academic science – discussed by T. L. Cottrell, Principal of the new University of Stirling – to technicalities such as catalyst evaluation, described by Dr. P. J. Thomas of Mond Division. The cost was considerable, and although the main burden was carried by such large concerns as ICI, Shell, British Petroleum, Fisons, Laporte, Unilever, Esso and Albright & Wilson, the fact that some 40 smaller firms also contributed

science and the schools: a challenge

Left to right: Dr. E. J. G. Toxopeus (Shell Internationale Research Maatschappij NV), Mr. Neil Iliff (deputy chairman of Shell Chemicals U.K. Ltd. and president of the Society of Chemical Industry), Dr. D. C. Martin (executive secretary, Royal Society) and Lord Todd (president of the Conference)



(Left) Foreign visitors to the conference included Dr. Barge (right) of the Société Nationale des Pétroles d'Aquitaine and Mr. K. Ono, Laboratoire de Chimie Macromoléculaire



Dr. D. S. Davies (deputy chairman, Mond Division) spoke on 'The inventive polymath'

(Far right) Mr. C. Hobbs of John Laing Research and Development Ltd. spoke on 'Some applications of chemistry to the construction industry'



reflects the wide concern about the present situation. The chemical industry, too, provided most of the speakers, but a number of senior academics also took an active part. There were representatives also from Government and the trade unions as well as a number of foreign visitors. The universities share industry's anxiety about the future supply of scientists and technologists. An outstanding university scientist – Lord Todd, Professor of Organic Chemistry at Cambridge – accepted the invitation to be president. The Conference was sponsored by the Royal Society through the British National Committee for Chemistry, which is affiliated to the International Union of Pure and Applied Chemistry (IUPAC).

For the schoolmasters, a special morning session was arranged to give them an opportunity to draw attention to their special problems, to criticise industry and the universities, and to suggest changes. This session was one of the outstanding features of the Conference: the schoolmasters spoke with a lucidity, force and conviction which their industrial and academic colleagues found hard to match.

ICI took a leading part in the Conference and its organisation and provided ten of the forty-five speakers. Company speakers included Mr. M. A. E. Hodgson of Company Planning Department, Head Office; Dr. G. A. Gamlen of the Petrochemical and Polymer Laboratory; Dr. P. W. Reynolds of Agricultural Division; and Dr. R. M. Lodge of ICI Fibres Ltd.

Conferences of this kind tend to be no more than a brisk exchange of fire between parties in firmly-entrenched positions which they have no intention of abandoning. What then did this one achieve?

First, although the Conference represented a fair cross-section of industry, universities and schools, the presence of so many leading men from companies with very considerable resources gave fair promise that talk would lead to action. An immediate decision was taken to set up a working party to consider proposals made during the Conference (and submitted afterwards on questionnaire forms given to each delegate) and to put into practice those likely to be effective.

Second, it was understood from the start that speakers could be as hard-hitting as they pleased. This was useful, since all concerned heard some very forthright comment. Thus Mr. M. J. W.

Rogers of Westminster School declared: 'The image of science and industry is as wrong in its way now as it was in the 1950s. If you can persuade people that it is good to buy your product, surely you can persuade them that it is good to make it.' On the other hand, the Conference provided an excellent opportunity to clear up some misconceptions. Thus another schoolmaster, from Jersey, urged that industry needs to put out a much better picture of the free enterprise system and the profit motive. In the public mind there is still much confusion between making profits and profiteering. Sir Peter Allen emphasised this point at the last ICI Annual General Meeting: 'I must remind you of something which is clear to you as shareholders but not so well understood, apparently, in some other places. Our ability to provide the capital needed to increase our exports and other overseas earnings depends, just as it does at home, on our ability both to make profits and to retain an appropriate share of them for investment.'

In the same context Dr. D. S. Davies, a deputy chairman of Mond Division, pointed out that money happens to be the only common yardstick by which we can measure such diverse factors as labour, raw materials and equipment. It is worth noting the curious paradox that while profits are still looked at here as being in some way questionable, the socialist republics of eastern Europe are now beginning to assess new projects in terms of profitability and to talk in terms of return on capital – which they expect to be considerable.

By a fortunate coincidence the Conference began just after the publication of the Dainton 'Enquiry into the Flow of Candidates in Science and Technology into Higher Education,' prepared for the Secretary of State for Education and Science. This deals with precisely the same problem of a swing away from science 'giving cause for concern not only in relation to a future supply of qualified manpower which in consequence might possibly prove inadequate to the nation's needs, but also as a symptom of a condition in which science may be losing the esteem which its importance as an element in education deserves.' Coincidence or not, for the chemical industry to have staged a major conference to discuss this theme only a fortnight after the appearance of the official report on the subject was quite an achievement.

people · projects · products

£25 million potash venture

The estimated output of a large potash mine which ICI and Charter Consolidated Ltd. propose to establish under the North Yorkshire moors near the village of Staithes would meet the whole of the United Kingdom demand for potash and provide a substantial amount for exports.

Charter Consolidated, which is a major UK finance company associated with the Anglo-American Corporation group, has acquired a 50 per cent interest in ICI (Minerals)

Ltd., which is being renamed Cleveland Potash Ltd. and will be the operating company. The £25m. project is subject to the necessary statutory consents, for which application has already been made.

Mining of the deposits would be of major significance to Agricultural Division because potash, all of which is at present imported, is an essential constituent of the compound fertilizers which have been made at Billingham, not far from the site of the proposed mine, for over 40 years.

Extensive investigations have established that deposits

of high-grade potash ore under the moors near Staithes, at a depth of between 3,500 and 4,000 feet, are enough to sustain an annual output of between one and one-and-a-half million tons of potash products for many years. On present values, an average output of one million tons would improve the UK balance of payments by about £14m. a year. The project should provide direct local employment for about 500 people. Work on the site is unlikely to begin before 1969, and the mine should be in full production four to five years later.

Gardening centre

Europe's largest gardening centre opened on May 1 at Syon Park, the Duke of Northumberland's home at Brentford, Middlesex. A living shop window, the centre covers 55 acres and combines elegant landscaping with a variety of 'ideal' gardens, special halls displaying equipment and gardening aids and a comprehensive self-service gardening store. This is a joint enterprise of ICI's subsidiary, Plant Protection Ltd., and the Duke himself. Right: The poster which advertises the Centre.

Africa dances: Two men of the Shangaan tribe who work at the Modderfontein factory of African Explosives and Chemical Industries Ltd., near Johannesburg, South Africa. From time to time various tribes represented in the 5,000 strong labour force put on weekend displays for their fellow employees. African Explosives and Chemical Industries is an ICI associated company



The greatest gardening show on earth



1. Rose Garden.
Six acres no less, rampant with 12,000 roses of all the best loved varieties, new and old.

2. Lake and Lakeside Garden.
A quarter of a mile long with flotillas of water plants.

3. Conservatory Flower Garden.
Splendid with Spring and Summer bedding plants, bulbs and lawns.

4. Great Conservatory.
The largest, oldest building of its kind in the world, housing a giant display of pot plants.

5. Selling Area.
The Centre's supermarket where you can buy or order all the plants and products exhibited by nurserymen and manufacturers.

6. Individual Gardens.
A village of different types of landscaped gardens (sizes various).

7. Restaurant.
Meal and bar facilities in 'The Planters' Grove'. Teas and light refreshments in other parts of the garden.

8. Flora's Lawn.
Flora, goddess of flowers, 55 feet high on a Doric column... overlooking herbaceous plants in an 18th century lawn which slopes gently down to the lake.

9. Woodland Garden.
Bulls a-bobbing among modern trees and shrubs. Blended within a landscape by 'Capability' Brown.

10. Garden Buildings Exhibition Area.
Summerhouses, sheds, greenhouses and more garden buildings besides.

11. Machinery Hall.
The nuts and bolts of modern gardening... a comprehensive range of every machine that matters.

12. Garden of Sculpture.
Very modern sculpture amid very old trees: a perfect combination.

13. Gardening Products Pavilion.
18,000 square feet displaying all the latest (and laziest) gardening aids.

14. Ornamental Walk.
If you go for garden ornaments and furniture, this is the walk to take.

Gardening information kiosks everywhere!

Hours of Entry.
Daily, except Tuesdays, 10.30 am to 5.30 pm.

Admission:
Adults 5/-; 16 years and under 2/6.

Free parking available.

Parties get in cheaper: details and further information from the Administration Department.

The Gardening Centre Ltd., Syon Park, Brentford, Middlesex. Tel: 01-560 0881.

The Gardening Centre, Syon Park.



Mr. E. Hodgkin

Mr. Eliot Hodgkin retired as general manager – overseas on March 31 after 40 years' service. Mr. Michael Clapham, one of ICI's deputy chairmen, writes:

Eliot Hodgkin joined ICI in 1928 straight from Oxford, with a degree in modern languages and a notable record as an oarsman. His pre-war career was spent on the sales side of the former General Chemicals Division (now part of Mond Division), of which he became a deputy sales manager in 1938. During this period he often visited the Continent, and laid the foundations of his wide knowledge of the Company's interests and activities in Europe.

Then came the Second World War. He joined the RAF and served in the Intelligence Branch, reaching the rank of Wing Commander. Demobilised in 1945, he returned to Millbank as deputy head of the European Department and became joint head in 1949. During the next seven years he was mainly concerned with organising and strengthening ICI's selling

organisation in Europe, an operation which provided the commercial base essential to the subsequent massive investment in manufacture, and he has retained a strong interest in the Company's affairs in Europe ever since – first as a member of the original European Council and later as a director of ICI (Europa). He has also been a director since 1951 of Finnish Chemicals OY, a company he helped to form in 1937 and which incidentally was one of ICI's earliest manufacturing ventures in Europe.

When in 1956 he was appointed deputy overseas controller his responsibilities were extended to ICI's world-wide selling organisation. In this job and later as general manager – overseas, which he became in January 1966, he played a key part in adapting our overseas selling arrangements to meet the changing pattern of world trade and in setting up the machinery for supervising overseas investment policy under the new ICI organisation. Preserving a fair balance between the often opposing interests of overseas companies and those of Divisions called for considerable diplomatic skill. Necessarily he had sometimes to criticise or disagree with colleagues, but he invariably managed to remain a friend whose opinions were respected and in his extensive travels he was always a most welcome visitor.

A keen gardener, Eliot Hodgkin has a fine collection of rare alpine and hardy bulbs, on which he is an ac-

knowledgeable authority. He has made many friends among other specialists all over the world, including some from behind the Iron Curtain. He is a committee member of both the Royal Horticultural and Alpine Garden Societies and writes articles from time to time for their Bulletins. On retirement he is joining the Advisory Council of the Syon Park Gardening Centre.

His many friends overseas will join his colleagues at home in wishing him a long and happy retirement.

Dr. H. G. Reid

Dr. Hugh Reid retired on March 31 as general manager – commercial services after nearly 34 years' service with ICI. Mr. Colin Bagnall, ICI commercial director, writes:

Hugh Reid graduated in chemistry from Edinburgh University during the economic recession in the early 1930s. He taught for some time and even played the organ in church before joining ICI (Fertilizer and Synthetic Products) Ltd. at Billingham in 1934. It is said that at his recruitment interview he revealed ignorance of the second law of thermodynamics; but it is further reported that he afterwards commented 'It doesn't matter a damn so long as you get in.' This, whether true or not, was typical of Hugh's approach to life in ICI, and it was to be of value to both him and the Company.

One of the relatively few Scots at Billingham, he soon established himself, with his quiet manner, unflappability and dry sense of humour, as a popular member of the community. He was well known in local badminton circles, and when war seemed to be inevitable he joined the Territorial Army. Called up just before the war, he served almost

throughout hostilities at home and overseas with 174 HAA Battery RA, one of two units which were formed mainly from local ICI people. He became a major and was mentioned in despatches.

On demobilisation he returned to Billingham Division as a section leader in the new Development Department, where he worked on several products now on the selling range of HOC Division. In 1948 he went to New York as Billingham Division technical liaison officer and established excellent relations with the relevant US companies, particularly M. W. Kellogg, who were designing Wilton's first naphtha cracker – the first in the world on a large commercial scale. Two years later he returned to the Division and was deputy works manager, first on the Olefine Works at Wilton and then on Oil Works at Billingham.

With experience of both the inorganic and organic sides of Billingham Division, it was not surprising when the ICI group director, Mr. W. D. Scott, chose Hugh as his personal assistant in 1955. For two years he helped establish close links between the Division and Head Office.

When Sir Hirst retired in 1957, Hugh was appointed to succeed him as General Manager, Severnside, but he had scarcely time to take up the appointment before again being seconded to ICI New York, this time as president and director. This was when I

first met him, I at that time running BNS, and I thought he fitted admirably into the North American scene. It was Hugh's ability to get on with people, his sense of realism and admirable qualities as a host, that earned him a wide circle of friends. It says much for Hugh's strength of character that after two postings in New York he still remained a bachelor. He returned to the United Kingdom in 1962, first as purchases controller and, when the Company was reorganised in early 1964, became the first general manager – commercial services.

His quiet and modest manner conceals a strong and courageous personality guided by realism rather than sentiment. A witty and effective debunker when necessary, his willingness to co-operate and his objectivity did a great deal to establish friendly relations between the many parts of the ICI organisation and with outside companies.

A third Queen's Award

For the third successive year ICI has gained the Queen's Award to Industry, this time for technological innovation by Dyestuffs and Mond Divisions in the synthesis and manufacture of bipyridyl herbicides and for export achievement by Pharmaceuticals Division. The Company is the only one in Britain to have won the award for both technological innovation and export achievement in each of the three years since it was introduced in 1965.

The award for the work on the bipyridyl herbicides was in recognition of the development and application of novel processes for the large-scale manufacture of the revolutionary weedkillers diquat

(sold as 'Reglone') and paraquat (sold as 'Gramoxone' and, to the home gardener, as 'Weedol'). Both herbicides were discovered by Plant Protection Ltd., the ICI subsidiary company which also markets them. PPL last year received the Queen's Award for export achievement largely through their overseas sales of the bipyridyls, which are marketed in 108 countries.

Diquat is made by Dyestuffs Division in a plant at its Huddersfield Works which was designed, built and commissioned within nine months in 1960 and which was extended in 1962 and in 1966.

About 80 per cent of output is sold overseas and in eight years diquat has developed from a laboratory chemical into an export product which has earned more than £1m. for Britain.

Paraquat is made by Mond Division at Pilkington-Sullivan Works, Widnes, using a process which is original and patented. It is the most complex plant in the UK, and probably in the world, to be computer-controlled.

This is the third successive year that Pharmaceuticals Division has won the award for export achievements. Direct exports rose in 1967 by 22 per cent to a record total of over £10m. Leading export products were 'Fluothane,' 'Synalar' and 'Nilverm,' a new animal health product which in its first full year achieved an export figure of over £1m.



A special occasion

The long service dinner-dance held recently by the Newcastle area sales office was more than the occasion for the presentation by Mr. R. S. Wright, ICI personnel director, of awards to four members of the area staff – three of them with 40 years' service. It was also the last to be organised from the offices in Claremont Place, which have been the area headquarters for 38 years. Later this summer the staff will move to new surroundings as tenants of part of the Northern Rock Building Society's new head office building at Gosforth on the outskirts of the city.

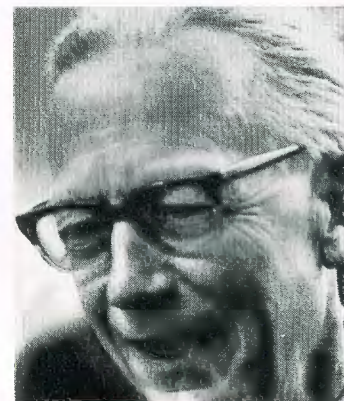
New ICI research associates

Three years ago ICI created a number of research associateships so that those of the Company's more outstanding scientists who do not wish to become too much involved in administration may see ahead of them scientific careers equal in terms of money and standing to those of senior managers of scientific departments. These associateships are awarded at two levels. The latest appointment to the position at the most senior level – senior research associate – is that of Dr. F. C. Roesler, mathematical and computing section manager in the Research and Development Department of Agricultural Division. Seven new research associates have also been appointed: Mr. W. J. Skinner (Agricultural), Mr. C. Morris (Dyestuffs), Mr. C. G. Cannon and Mr. R. H. Speakman (ICI Fibres Ltd), Dr. J. S. Morley and Mr. J. M. Thorp (Pharmaceuticals) and Mr. S. Turner (Plastics).

Dr. Roesler is a mathe-

This year's dinner was therefore a very special event, and those present included three former Newcastle area managers who are now retired, Mr. Dan Gardner, Mr. John Green and Mr. Charles Ross. With Mr. Wright, who recalled his particular interest in the Newcastle area when he was chairman of Agricultural Division, they and other guests were welcomed by Mr. Ted Horan, the present area manager. The four members of staff who received awards were Mr. E. Armitage, Mr. J. M. T. Watson and Mr. J. A. Storey (all 40 years), and Mr. E. Crossley, a building products representative for Agricultural Division who has been with ICI for 20 years.

matical physicist who joined ICI in 1953 to work in materials research at Head Office. He moved to Billingham in 1956, when the first research computer was installed, and became a section manager in the fundamental research group two years later. He has been particularly concerned with the application of automatic computing in research and engineering and was appointed a research associate in 1965. His latest published work is on the calculation of heat transfer in steam reformers; earlier work has ranged over such fields as fluid mechanics, cosmic rays, visco-elastic behaviour and the fracture of solids.



Life's never dull on a bike



John Helms

'Yes, sir?' said the landlord of the *Spinner and Burgomat*.
'A pint of bitter, please.'

I watched the liquid swirl and froth into the glass tankard and then settle into a clear amber liquid that sparkled in the sunlight streaming through the open windows. It tasted as good as it looked, and I emptied half the tankard in one long, slow, satisfying draught.

'Aaaaah . . . that was good!'

The landlord eyed my open-necked shirt, knickerbockers and gaily-patterned stockings.

'You're cycling, sir?' (Clever man!)

'Yes. I'm just on the way home from work.'

'And where do you work?'

'Runcorn.'

'That's a long way on a bicycle.'

It is: in fact, about twelve miles . . . or fifteen or twenty. It depends which way you go.

'And where do you live?'

'Widnes.'

The landlord opened his mouth to speak and then shut it again. He appeared to be confused.

Widnes is in Lancashire, one mile north of Runcorn, across the River Mersey. The *Spinner and Burgomat* is in the heart of rural Cheshire, well to the east of both towns.

'You're not lost, sir?'

A reasonable question from anyone who thinks that travelling is just getting from A to B, or Runcorn to Widnes. But an irrelevant question to anyone like me, who thinks that the road that goes past his front gate leads not to the cross-roads at the bottom of the hill but goes to the end of the world, past Samarkand and rose-red cities half as old as time. I've already followed it to Scotland and the Outer Hebrides, to Wales and the Wye Valley, to Holland and Norway. One of these days I'm going to travel along it as far as Portugal and Austria . . . and perhaps beyond.

I travel along it every workday to ICI's Mond Division Headquarters in Runcorn. On a bicycle. Wet or fine. Rain or shine. Some days the road is five miles long. Some days it is thirty-five miles long.

Most mornings I have difficulty in tumbling out of bed. I have a hurried breakfast, and then it's head down and a furious pedalling session along the shortest route.

I live dangerously for a few moments on the Runcorn-Widnes Bridge with its swarming mass of hurrying motorists and its high accident rate. Sometimes a blustery sou'wester tries to pluck me from the bridge and drop me into the murky waters of the River Mersey. The problem of getting into the right stream of traffic to negotiate the roundabout at the end is never less than interesting.

If I have a couple of minutes to spare I can finish off with a flourish by going round the back of the cenotaph, up a steep little hill, ignoring a "Cycling Prohibited" notice, and there I am on a track across the fields where I can pretend that I am 'out in the wilds' for a few moments. If I have half an hour to spare I know a place where the road dips through a little dell where the May mists play among the bluebells, or a wood where the autumn sunshine caresses the dead bracken and brings it to golden life for a moment as I pass.

I like to arrive ten minutes early so that I can have a stripped-to-the-waist wash and a complete change of clothing before I sit at my desk. Every Monday morning sees me taking a fresh supply of clean clothes in my saddlebag, and every Friday evening the bag is full of dirty shirts, socks, etc., ready for the washing-machine.

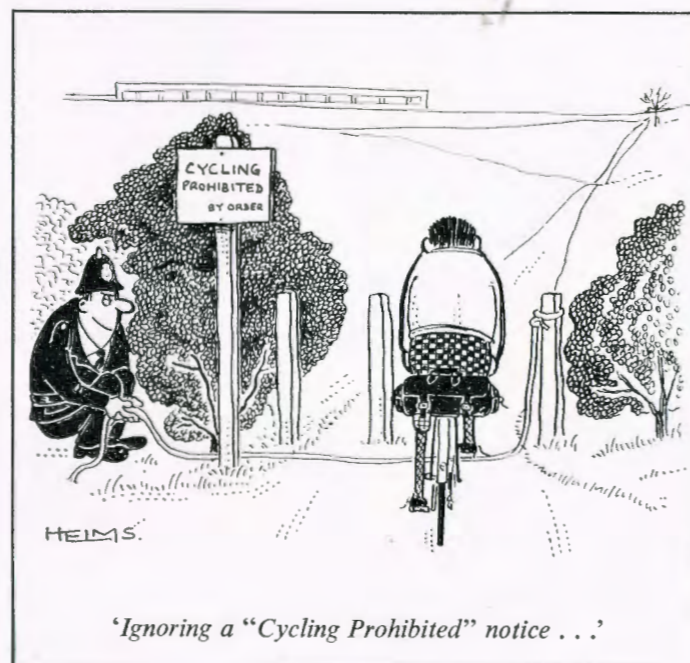
The evening journey is a prospect that lightens the duller moments of work. The ten minutes it takes to get out of my suit and into cycling gear allows the main rush of traffic to disperse. In another ten minutes I can get into secluded, traffic-free lanes. Lanes that meander through lush Cheshire farming country, past meres and woods and sleepy villages. Three hundred years ago Lady Mohun wrote 'Cursed roads, as all Cheshire is: if one could fly in the air, it would be a charming country.'

The roads are much improved; it is still a charming country, and a bicycle is the ideal vehicle for enjoying that charm. Twenty, fifty, a hundred lanes await me. If I feel that some violent exercise would be good for my jaded mind I can find a 1-in-8 hill to climb. Or I can wander gently between bird-song and windsigh and lean on a five-barred gate to watch cloud-shadows chase each other across the fields. Whatever my mood, there is a lane and a pattern of fields and woods to match it.

I have always lived in this area, and some of the lanes take me right back into my boyhood. The road that goes past the little rural school where I learned my ABC has not changed in over thirty years. I wonder if three teachers still teach all the pupils from five years to fifteen (fourteen in those days), each running three classes simultaneously? I can still identify the spot in the hedgerow fifty yards away where the old road-mender set fire to a wasps' nest five minutes before we came out of school thirty-five years ago. By the time we came trooping out the wasps were fine and mad. Anyone who ran the gauntlet with anything less than half a dozen stings was lucky indeed!

Another lane takes me past the secret place where, as a very small boy, I used to lie on my back among the tall green ferns and watch fluffy white clouds sailing across the vast blue sky. I used to think that clouds sailed round and round the world without changing shape, and tried to memorise their outlines so that I would recognise them the next time round! I still look up at the western sky sometimes and hope to see a bearded mandarin with a long pigtail and only one leg come sailing over the horizon.

Sometimes I cycle past the drive that used to lead to Dutton Hall. Many years ago the old hall was taken down, the bricks and timbers carefully numbered and transported to Somerset, where it was rebuilt. My mother worked in service at the Hall



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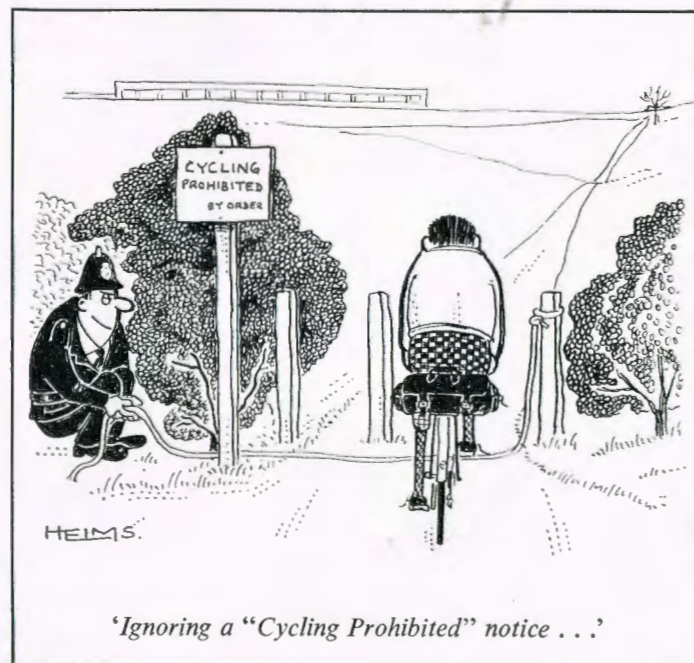
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'The wasps were fine and mad'

when she was a young girl and I can ride along the same lanes that she walked to meet and court my father, who worked eight miles away at Swineyard Hall, a splendid black-and-white moated farmhouse. Was it by this gate that they met? Beneath this tree that they held hands and whispered? Sometimes, when the evening air is very still so that the leaves lie quiet and motionless on the branches, I fancy I can almost hear a faint echo of their voices.

Down these lanes I see the years grow and flourish, age and die. I ride along the lanes in spring showers, summer sunshine and winter's ice. The homeward journey on star-bright nights when my tyres crunch the frost-coated gravel and overhead the glittering Plough carves its silent furrow round the Pole star, when countryfolk huddle over their TV sets and leave the world to darkness and to me, are as enjoyable as the rides on warm summer evenings.

I see the swallows arrive, first in ones and twos and then in dozens, swooping down the lanes in search of insects. I hear the first call of the cuckoo and thrill to the pure melody of a blackbird, invisible in the green depths of a nearby wood. My winter lamp lights an amber spark in the eyes of farm cats, rabbits and other small nocturnal prowlers.

All these treasures are mine because I go to work on a bike. If I travelled by car or public transport I would no doubt find the journeys as dull and uninteresting as my

colleagues find them. I probably would not have met the stray gipsy horse and returned it to its owners to be rewarded with a cup of tea – and then spent ten anxious minutes wondering if the tea was drugged and if I would be murdered when they found that I only had 7s. 3d. on me!

I would not have looked up one dark night to see a small white circle of light hovering over my head. A mysterious, menacing shape that followed me silently and made the hairs on the nape of my neck prickle with fright. I have always been a voluble doubter of UFOs. Was this a visitor from outer space come to silence my scoffing tongue? Or a ghost? I was approaching Hall Wood, which is reputed to be haunted. Suddenly the shape swooped down across the rays of my lamp . . . and revealed itself as a tawny owl before disappearing into the blackness.

Some journeys are less enjoyable than others. Fog and ice are unpleasant hazards, and sometimes headwinds seem to outnumber tailwinds by four or five to one; but even on a cold, wet, windy day the bicycle is my first choice, and I wouldn't swap it for a Rolls-Royce. Once astride a bicycle I am defiantly cheerful, whatever the conditions. An occasional drenching with icy rain is a small price to pay for the many pleasures of cycling. I enjoy walking too, but every other form of transport seems dull and uninteresting. The motor car is a glass and steel box insulated against the sounds

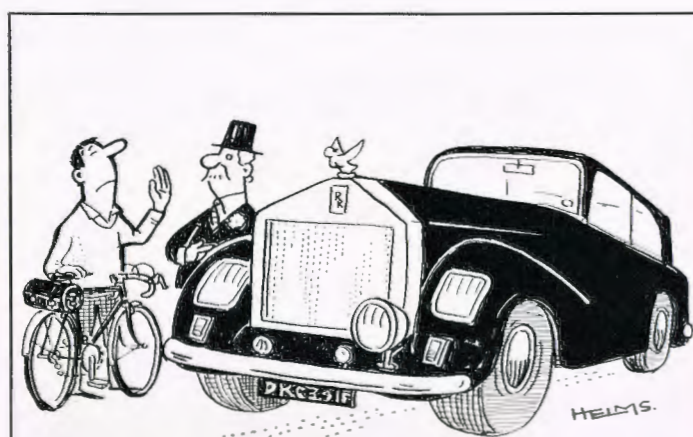
and scents of nature. I have always regarded it as a vehicle suitable for the idle, the elderly, the dull of intellect, and anyone who thinks that personal comfort is one of life's great experiences. The motorist knows nothing of the scent of wayside flowers, birdsong, the chatter of brooks, the smell of newly-turned earth. Motoring is the interlude between leaving and arriving, the void between home and the office.

Life is never dull on a bicycle.

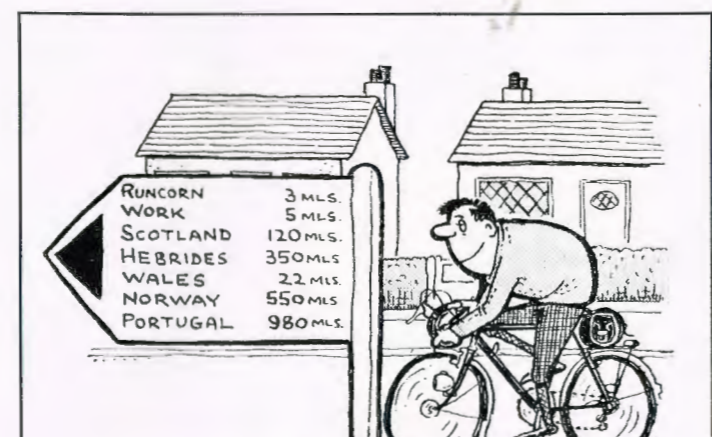
My miles between home and office add up to about 3,500 each year. They are an experience I would not willingly miss. So far I have cycled approximately 75,000 workaday miles, and, granted a continuing immunity from savage dogs, falling masonry, careless motorists, breathalyzer tests and redundancy, I should manage another 58,000 before I receive my retirement certificate. That will be 5½ times round the world under my own power just to get to my desk every day.

And then, perhaps, I will be able to emulate my old friend Fred Baker. Fred started his retirement two years ago with a six weeks' cycle tour of Italy and Corsica. He and his wife returned home in time to have a fortnight's rest before accompanying friends on a two weeks' bicycle tour of southern Ireland. A month later they went with other friends to Scotland. What a splendid way to start a retirement!

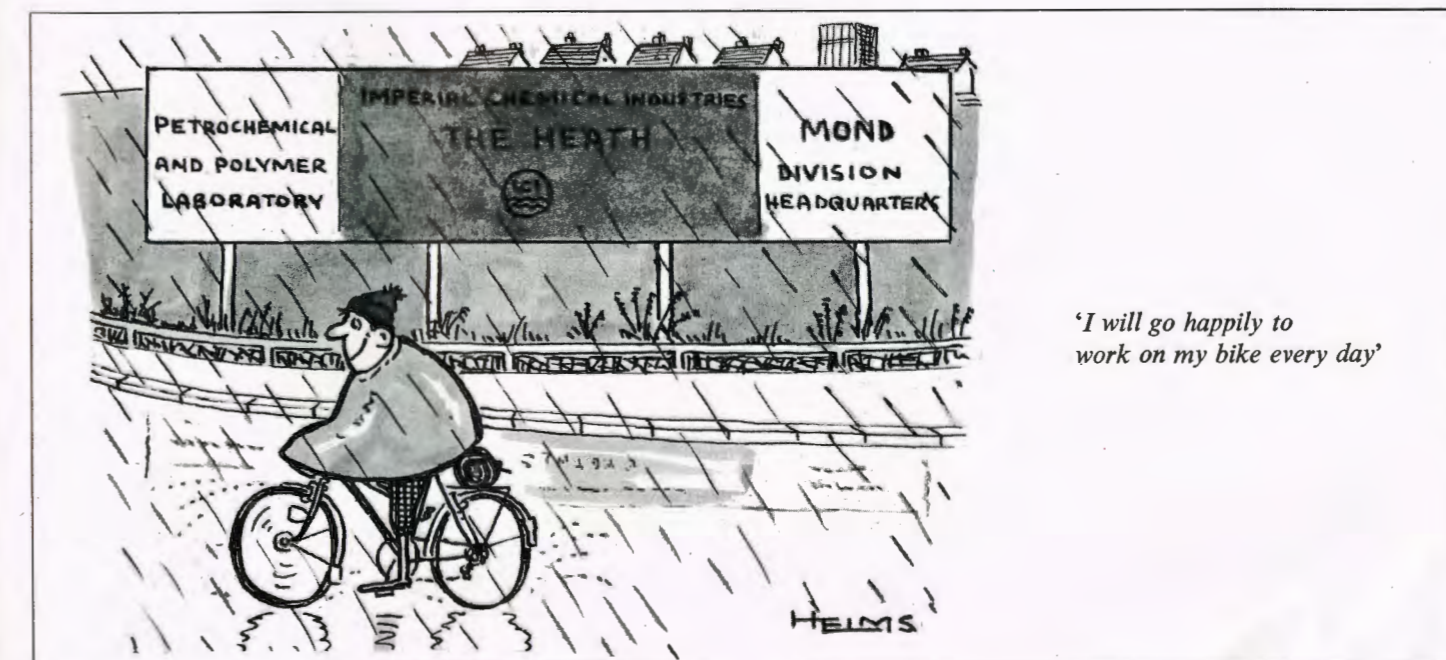
In the meantime I will go happily to work on my bike every day and envy no one.



'I wouldn't swap it for a Rolls-Royce'



'Portugal . . . and perhaps beyond'



'I will go happily to work on my bike every day'

at home with colour



Room sets for the Colour Schemer were designed by Jack Widgery (above) and John Lupton of the Colour Advisory Department at Slough. Since last September they have completed between them more than 100 sets for the Schemer and for the 1969 pattern books for 'Vymura' and 'WalFlair'

(Facing page) A page from the Colour Schemer showing two room schemes in dramatic mood using ICI decorating products. The one on the left is intended for a kitchen or bathroom, on the right for a dining room or hall and staircase scheme



More people give their homes a face-lift in the weeks before Easter and Whitsun than at any other time of the year – which explains why sales of paint and wallpaper go up steeply during these periods and why the manufacturers launch special promotions.

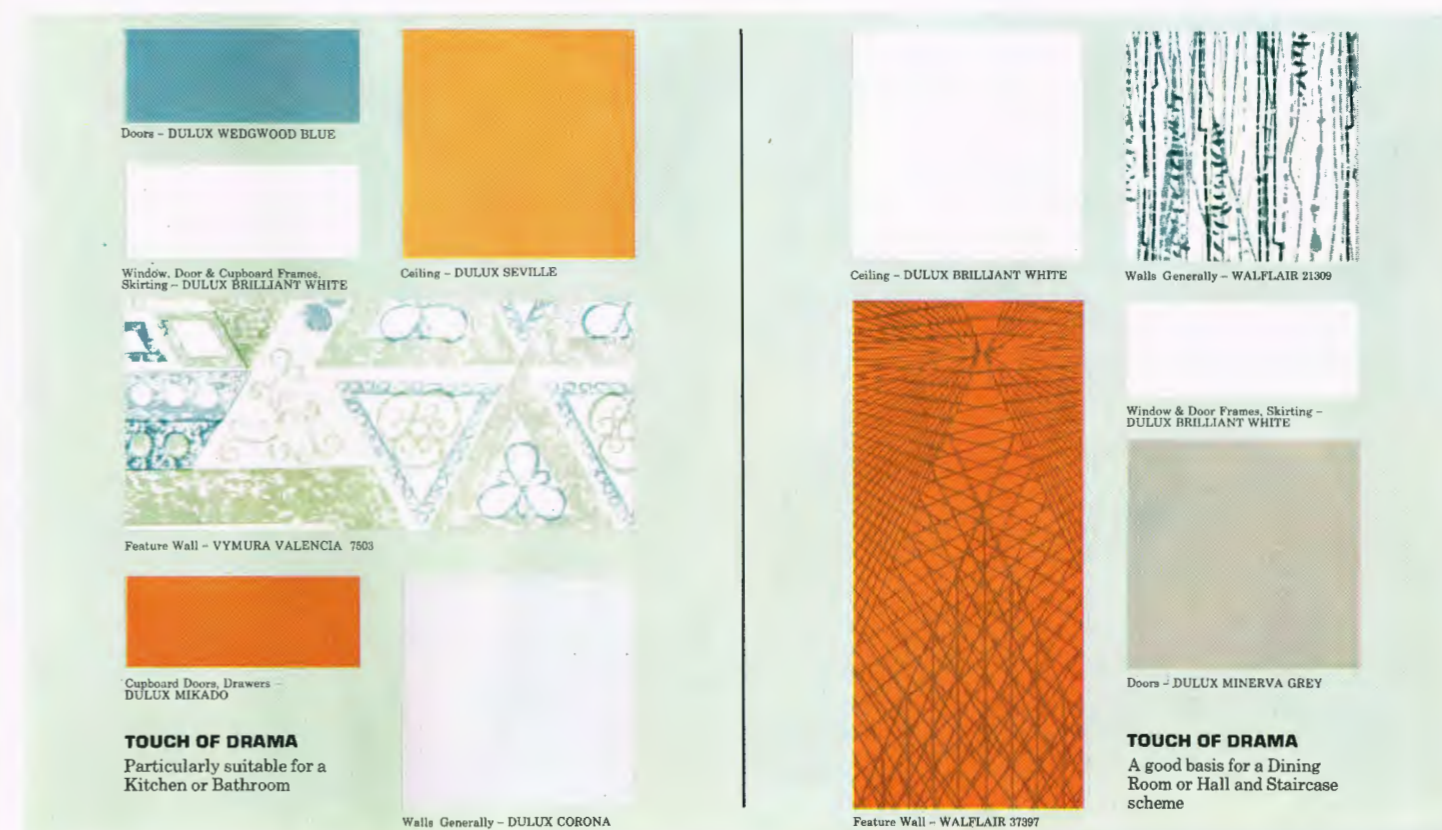
One of the main features of Paints Division's campaign this year is the ICI Colour Schemer, designed to sell decorating ideas in 'Dulux' paints, 'Vymura' wallcoverings and 'WalFlair' wallpapers. The first of its kind, the Colour Schemer looks rather like a wallpaper pattern book and contains 68 room schemes divided into eight 'mood' sections, e.g. sunny, dramatic, romantic. Each section contains both coloured illustrations and colour scheme suggestions combining paint and wallpaper.

Paints Division's decision to build its 1968 promotion around the Colour Schemer represents a shift of emphasis

only in increasing its share of the market but in increasing the size of the overall market in paint and wallpapers.

Until now the householder has tended to redecorate only when he had to. The current Paints Division promotion seeks to persuade him (or particularly her!) to decorate more for its own sake – to try out the latest designs and colours. In other words, to regard home decorating as they would fashion or cosmetics. The Colour Schemer is therefore a part of a much larger programme which includes television and press advertising, two decorating supplements, one produced in collaboration with the magazine *Woman*, the other with *Ideal Home*, and counter displays.

There are other benefits too. Since the ending of retail price maintenance the decorating market has seen a great deal of price-cutting. Many of the price-cutters offer only



from traditional methods of selling paint and wallpaper in which each product was advertised on its separate merits. A look at the decorative products market tells its own story. Of the eleven million gallons of paint sold annually over the shop counter to home decorators, 'Dulux' sells nearly three times as much as any rival brand. The Division's 'Vymura' vinyl wallcovering is also a clear market leader and 'WalFlair' wallpapers are making more and more impact. But the total market is quite static. Paints Division, therefore, is interested not

a small range of colours and virtually no service. Paints Division's promotion this year – backed by an expanded and very much improved paint colour range – should help to spread the demand for colour and so to support the specialist paint and wallpaper retailer who carries full ranges of 'Dulux,' 'Vymura' and 'WalFlair.' These specialists are vital if Paints Division are to maintain a truly national distribution.

'We have two main objectives with the Colour Schemer,' says Philip Hanscombe, decorative products

(Below) Brief for the photographic studios where the room sets are built includes detailed instructions for carpet and curtain colours and for all accessories. Here Jack Widgery consults Colour Advisory Department's extensive index of fabric and carpet designs. With him are John Lupton (seated) and Derek Butler of Paints Division's Publicity Department

(Below, right) Choosing curtain fabric for a room scheme from the Colour Advisory Studio's stock of samples are Stanley Wood, head of the Department (right), and John Lupton



(Facing page) At Studio Briggs in London, where the room sets are built and photographed, John Lupton and Jack Widgery check on shooting schedules with the photographer Leslie Scrivell (extreme right) and his assistant John Treggiden

(Facing page, far right) Checking through an advance copy of the second Colour Schemer, due out in July, are Denis Wright, retail marketing officer, Peter Thomson, assistant marketing manager, and Gordon Murray-Smith, Marketing Department

marketing and publicity manager. 'The first is to provide a service to the householder. For most people the technical know-how of decorating – the right paints, tools, etc. – is not so difficult as choosing the right colour scheme. Our aim, therefore, is to offer ideas and reassurance. In doing so we should achieve our second objective – to help retailers sell a wider range of our products and to save them valuable selling time by helping their customers to make up their minds more quickly when choosing paints and wallcoverings.

'The Colour Schemer is only part of our total marketing operation. It is a symbol, if you like, of our new marketing strategy. The paint market has been static in volume for about six years – so our long-term strategy must be to make it grow. With 'Vymura' and 'WalFlair' on our range we can now talk in terms of complete home



decoration, and by selling decorating ideas with the Colour Schemer we hope to persuade people to try out new decorating schemes because they feel like a change. Home decorators look at decorating as a whole and they buy paint and wallpaper to create a certain effect. With the Colour Schemer we are offering total decorating ideas, all in one package, by suggesting some of the effects our materials can produce.'

Peter Thomson, assistant marketing and publicity manager, has had special responsibility for launching the

Colour Schemer. 'We thought we'd have a big problem getting the Colour Schemer accepted by retailers, but in fact we did extremely well. Of the thousands of stockists to whom we offered it, a high proportion asked for extra copies to lend out to customers.

'The basic idea for the Colour Schemer came from Matherson-Selig of Ipswich, who make our paint colour cards. They showed us a folder which their American associate company had produced for a plastic-laminate company, with combinations of formica-type laminates for kitchens. It gave us the idea of putting together wallpaper patterns and paints in a schematic form. This was back in May last year. By August we had really got our ideas firm and we began to get colour schemes worked out and photographs taken. In October we test-marketed it and in the same month we also briefed the sales force.



Then during November and December the retail representatives did their bit by recruiting the retailers to take part.

'When we first went into wallcoverings we did a certain amount of advertising to link their brand names with 'Dulux.' We had bus sides, for instance, with 'Dulux' – 'Vymura' – 'WalFlair' on them – to try to get some of the established reputation of 'Dulux' to rub off on these other two brand names. This year we are using much more complex and sophisticated techniques in trying to put over to people the benefits of using two, or even all

three, of our products together for a whole room scheme. The Colour Schemer now in the shops and a further one with entirely new colour schemes, due out in July, have been very much a team effort between members of the Marketing, Colour Advisory and Publicity Departments. Derek Butler, graphics man in Publicity Department, explains: 'I was responsible for setting the visual standard of the publication – the ratio of pictures to diagrammatic colour scheme pages, how many illustrations we could get for the money, and the number of room sets we could design and photograph in the limited time available. The cover design was particularly important because we had to build a promotional platform around it, and since we were planning more than one issue it had to be adaptable. Obviously one wants the two volumes to look alike, but not so alike that the public



Photograph: Roger Wood

can't tell the difference. For the next issue, therefore, we are keeping the identical layout but with a new room setting and a grey-green cover.'

Jack Widgery and John Lupton of the Colour Advisory Department designed all the room sets illustrated in the Schemer and, with Derek Butler, supervised photography at Studio Briggs in London. 'Lack of time was a stimulus,' says Jack Widgery. 'For the original Schemer we had just five weeks to design the room sets and get them built and photographed at the studios. We shot one set

at home with colour

a day. I had done a certain amount of photographic work before this project, but not set designing. (The Colour Advisory Department deals mainly with large-scale schemes for contract work). Now we have more experience we know the short cuts and reckon to photograph at least two a day, sometimes more.

'One problem is to get variety in the sets. It becomes difficult after a time to think of anything but a corner of a room – two 'flats' put together. I find myself slipping into certain habits. I have a right-hand bias for curtains and windows, I've noticed! John and I chose the patterns of 'Vymura' and 'WalFlair' we used in individual schemes to fit in with the mood groupings laid down in our brief from Marketing Department.

'Out-of-the-ordinary decorating problems are beyond our scope in the Colour Schemer. Our aim is more down-

to-earth – to get people to use bolder colours than they might have thought of or to try more subtle mixtures of tones, colours and patterns. And we are, of course, trying to show them the very interesting combinations available in ICI products. With 130 'Vymuras' and 150 'WalFlair' plus the various paint ranges you can permutate the three products in all sorts of ways.'

Denis Wright and Gordon Murray Smith in Marketing Department co-ordinated the Colour Schemer project from 'an idea in various people's heads to the final product now in the shops.' This has involved a great deal of detail, working out schedules, checking copy, making sure everyone kept within the budget, even trying out a dummy Colour Schemer in one of the local shops to make sure they had the formula right, that it was what the public and the retailer wanted.



Room set from the Colour Schemer, illustrating the dramatic mood. 'WalFlair' papers used were 24438 in the dining recess (right) and 27313, with 'Dulux' Anchusa on the left-hand wall



'We set aside a few copies of the first schemer to test it out with small professional decorators. We thought they would find a pattern book like ours very useful to show to their clients. It has proved so popular that we are having extra copies of our second schemer printed to sell to decorators.

'One thing we have learned is that people like the room sets. The pictures tell the story immediately. We have 16 illustrations in each pattern book, but we could easily have done with double or treble the number.'

How much a drop of water bounces off a wet or a dry surface makes quite a difference to the success of a pesticide spray. This photograph, by Nigel Cattlin of Jealott's Hill Research Station, shows the recoil of a droplet (circumference 3 mm), coloured with a scarlet dye, released from a height of 12 in. into a bath of water. He used a Nikon F. 35 mm camera fitted with an auto-micro 55 mm Nikkor lens, at a distance of 4 in. using an exposure of 1/1250th of a second.



ICI

magazine

View from the office window - 1

Head Office of ICI (China), from which this picture was taken and where most of the 250 employees work, is in Hong Kong. The Crown Colony is an important market for ICI's dyestuffs, fibres and plastics and IMI's non-ferrous metals, used in making textiles, plastic flowers, cameras, binoculars, torches and electric plugs. ICI (China) also sells to China, Korea, Mongolia, Taiwan, Vietnam, Cambodia and Macao

